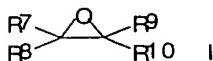
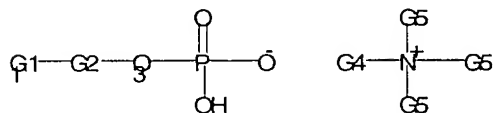


PI JP--04282390 A2 19921007 1991JP-0044977 19910311
 OS CASREACT 118:192007
 GI



AB Phosphates R1(OR2)mOP(O)(O-)OCR7R8CR9R10OH N+R3R4R5R6 [R1 = (halo-substituted) C1-36 alkyl or alkenyl, C1-15 alkyl-substituted Ph; R2 = C2-4 alkylene; R3-6 = C1-20 alkyl, C1-15 alkyl-substituted Ph, .gtoreq.1 of R3-6 is C.gtoeq.4 alkyl or substituted Ph; R7-10 = H, org. group; R7R9 may form a ring; m = 0-30] are prepd. by treating ammonium phosphates R1(OR2)mOP(O)O- N+R3R4R5R6 with epoxides I in epoxy-inactive org. solvents. A soln. of monotetrabutylammonium mono-2-decyltetradecyl phosphate in hexane was treated dropwise with epichlorohydrin at 40.degree., then refluxed for 7 h to give 95.0% 2-decyltetradecyl 2-hydroxy-3-chloropropyl phosphate tetrabutylammonium salt.

MSTR 1



G1 = Ph (SR alkyl<(1-15)>)
 G2 = (0-10) 8-1 9-3



G3 = alkylene<(2-4)>
 MPL: claim 1

L5 ANSWER 22 OF 42 MARPAT COPYRIGHT 1999 ACS
 AN 118:59876 MARPAT
 TI Preparation of phosphate esters
 IN Yamaki, Kazuhiro; Takada, Hiroshi; Fujikura, Yoshiaki
 PA Kao Corp., Japan
 SO Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE